# WEST Search History

DATE: Tuesday, June 25, 2002

Set Name side by side	Query	<u>Hit</u> <u>Count</u>	Set Name result set
DB=U	ISPT; PLUR=YES; OP=AND		
L1	fla or flaa or fla-a or (fla near3 a)	15104	L1
L2	L1 and (campylobact\$ or coli or jejuni)	3181	L2
L3	L1 and (campylobact\$ or ccoli or cjejuni or jejuni)	216	L3
L4	gene or genetic or genetically or nucleic or nucleotide or polynucleotide or poly-nucleotide or dna or cdna or cloned or plasmid or vector or mrna or rna or sequence	556565	L4
L5	L4 an d13	1	L5
L6	L4 and I3	213	L6
L7	L1.ti,ab,clm.	34	L7
L8	L7 and 12	5	L8
L9	L8 and 14	5	L9
L10	L7 not 19	29	L10
DB=U	SPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES;		
OP=ANL			
L11	campylobact\$.ti,ab,clm.	753	L11
L12	L11 and (flagellin or flagella or flaa or fla-a or motility)	70	L12
L13	L12 not 110 not 17	67	L13
L14	L13 and (mbp or maltose\$)	1	L14
L15	L1 and (mbp or maltose\$) not 114	709	L15

L16	L1 same (mbp or maltose\$) not 114	61	L16
L17	(mbp or maltose\$) same (flagellin or flagella or flaa or fla-a)	116	L17
L18	L17 and (campylobact\$ or ccoli or cjejuni or jejuni)	3	L18
L19	L18 not  17	0	L19
L20	117 not 118	113	L20
L21	(6270974 or 6235480).pn.	3	L21
L22	('6270974'  'US 6235480B'  '6235480')[ABPN1,NRPN,PN,WKU]	3	L22

END OF SEARCH HISTORY

	WEST	
	Generate Collection	Print
L20: Entry 2 of 113	File: PGPB	May 30, 2002

DOCUMENT-IDENTIFIER: US 20020062835 A1 TITLE: Methods of modulating hair growth

# <u>Detail Description Paragraph</u> (59):

[0146] A common approach uses the maltose receptor of E. coli (the outer membrane protein, Lamb) as a peptide fusion partner (Charbit et al. (1986) EMBO 5, 3029-3037). Oligonucleotides have been inserted into plasmids encoding the LamB gene to produce peptides fused into one of the extracellular loops of the protein. These peptides are available for binding to ligands, e.g., to antibodies, and can elicit an immune response when the cells are administered to animals. Other cell surface proteins, e.a., OmpA (Schorr et al. (1991) Vaccines 91, pp. 387-392), PhoE (Agterberg, et al. (1990) Gene 88, 37-45), and PAL (Fuchs et al. (1991) Bio/Tech 9, 1369-1372), as well as large bacterial surface structures have served as vehicles for peptide display. Peptides can be fused to pilin, a protein which polymerizes to form the pilus-a conduit for interbacterial exchange of genetic information (Thiry et al. (1989) Appl. Environ. Microbiol. 55, 984-993). Because of its role in interacting with other cells, the pilus provides a useful support for the presentation of peptides to the extracellular environment. Another large surface structure used for peptide display is the bacterial motive organ, the flagellum. Fusion of peptides to the subunit protein flagellin offers a dense array of may peptides copies on the host cells (Kuwajima et al. (1988) Bio/Tech. 6, 1080-1083). Surface proteins of other bacterial species have also served as peptide fusion partners. Examples include the Staphylococcus protein A and the outer membrane protease IgA of Neisseria (Hansson et al. (1992) J. Bacteriol. 174, 4239-4245 and Klauser et al. (1990) EMBO J. 9, 1991-1999).

\_\_\_\_\_6/25/02 2:24 PM

# WEST

# End of Result Set

Generate Collection Print

L14: Entry 1 of 1

File: DWPI

May 18, 2000

DERWENT-ACC-NO: 2000-376214

DERWENT-WEEK: 200203

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TITLE: <u>Campylobacter FlaA</u> protein and coding sequence, useful in reducing <u>Campylobacter</u> intestinal colonization

# Bas ic Abstract Text (1):

NOVELTY - A polynucleotide sequence (I) encoding a polypeptide that is a portion of the <u>flaA</u> gene of <u>Campylobacter</u>, the polynucleotide sequence consisting of all or a portion of the 999 bp DNA sequence given in the specification, is new.

# Basic Abstract Text (3):

(1) a recombinant <u>FlaA</u> polypeptide consisting of all or a portion of the 333 residue amino acid sequence given in the specification;

## Basic Abstract Text (6):

(4) a method for inducing an immune response to <u>FlaA</u> comprising administering the polypeptide of (1) to a subject;

## Basic Abstract Text (7):

(5) a method of reducing <u>Campylobacter</u> intestinal colonization in a subject, the method comprising administering an immunologically effective amount of <u>MBP-FlaA (Maltose</u> Binding Protein<u>-FlaA)</u> with or without an adjuvant; and

## Basic Abstract Text (8):

(6) a method of reducing <u>Campylobacter</u> intestinal colonization in a subject, the method comprising administering an immunogenically effective amount of <u>MBP-FlaA</u> + LYR192G.

#### Basic Abstract Text (11):

USE - The polypeptide can be used to induce an immune response to <u>FlaA</u>. When linked to <u>maltose</u> binding protein (<u>MBP</u>) the polypeptide can be used to reduce <u>Campylobacter</u> intestinal colonization (all claimed).

## Basic Abstract Text (12):

ADVANTAGE - By administering the polypeptide the possibility of the development of Guillain-Barre syndrome (GBS) which is seen with whole cell <u>Campylobacter</u> vaccines is reduced or avoided.

	WEST	Cananas manunanan manunan manu
	Generate Collection Prin	\$
_20: Entry 20 of 113	File: USPT	Nov 7, 2000

DOCUMENT-IDENTIFIER: US 6143524 A

TITLE: Peptide and protein fusions to thioredoxin, thioredoxin-like molecules, and modified thioredoxin-like molecules

# Brief Summary Paragraph Right (7):

To overcome these problems, the art has employed certain peptides or proteins as fusion "partners" with a desired heterologous peptide or protein, to enable the recombinant production and/or secretion of small peptides or larger proteins as fusion proteins in bacterial expression systems. Among such fusion partners are included LacZ and TrpE proteins, <u>maltose-binding</u> protein and glutathione-S-transferase[See, generally, Current Protocols in Molecular Biology, Vol. 2, suppl. 10, publ. John Wiley and Sons, New York, N.Y., pp. 16.4.1-16.8.1 (1990); and Smith et al., Gene 67:31-40 (1988)]. As another example, U.S. Pat. No. 4,801,536 describes the fusion of a bacterial <u>flagellin</u> gene to a desired gene to enable the production of a heterologous protein in a bacterial cell and its secretion into the culture medium as a fusion protein.

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	Generate Collection Pr	int
20: Entry 21 of 113	File: USPT	Mar 7, 2000

DOCUMENT-IDENTIFIER: US 6033877 A TITLE: Peptide expression and delivery system

#### Brief Summary Paragraph Right (4):

To overcome the difficulties encountered in recombinant expression of peptides, there have been various attempts in the art to express a peptide in a conformation reflective of the conformation of the peptide when expressed as part of the protein from which it is derived. For example, one approach is to express the peptide as part of a fusion protein. Typically, a fusion protein consists of a microbial (e.g. bacterial) polypeptide backbone into which is incorporated an amino acid sequence representing one or more heterologous peptide sequences. A step in fusion protein expression comprises inserting into a gene, encoding the microbial polypeptide, a nucleic acid sequence encoding one or more heterologous peptides. Usually the gene is part of an expression vector, such that when the vector is introduced into a host cell system, the fusion protein is then produced either as remaining host cell-associated, or secreted into the culture medium of the expression system. Examples of microbial polypeptide backbone includes Escherichia coli proteins Lam B (Charbit et al., 1991, J. Bacteriol. 173:262-275), LacZ, trpE, maltose-binding protein, and thioredoxin (U.S. Pat. No. 5,292,646); a fusion protein including a portion of an E. coil or Salmonella lipoprotein with OmpA or Omp C or Omp F or Omp T (U.S. Pat. No. 5,348,867); bacterial flagellin (U.S. Pat. No. 4,801,536); Schistosoma japonicum glutathione-S-transferase; baculovirus polyhedrin (U.S. Pat. No. 4,745,051); and filamentous phage pIII (Scott and Smith, 1990, Science 249:386-390).

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3	Generate Collection	Print

L20: Entry 25 of 113

File: USPT

Aug 3, 1999

DOCUMENT-IDENTIFIER: US 5932220 A

TITLE: Diagnostic tests for a new spirochete, Borrelia lonestari sp. nov.

# Brief Summary Paragraph Right (26):

A fusion protein or peptide comprising a segment of SEQ ID NO:2 having at least one B. lonestari sp. nov.-specific amino acid or species-specific combination of amino acids of Table 1 is also an aspect of the present invention. The fusion protein preferably comprises SEQ ID NO:26, however, one skilled in the art, in light of the present disclosure, would be able to construct a number of different fusion proteins from a variety of vectors and the B. lonestari sp. nov. DNA sequences provided herein. It will also be understood that amino acid and nucleic acid sequences may include additional residues, such as additional N- or C-terminal amino acids, and yet still be essentially as set forth in one of the sequences disclosed herein, so long as the sequence meets the criteria set forth above. Segments of the <u>flagellin</u> gene may be cloned next to N-and/or C- terminal sequences of genes for other proteins, such as, .beta.-galactosidase or <u>maltose</u> binding protein. A signal peptide that may allow better expression may be optionally included in the fusion protein. It is not necessary that the <u>flagellin</u> protein be transported, however, the signal peptide may help to prevent protease digestion.

#### Detailed Description Paragraph Right (83):

The present example describes the placement of the nucleotide sequence represented by SEQ ID NO:1 into a construct to provide a fusion protein for immunoassay. This construct supplies an N-terminus and a C-terminus for the recombinant fusion protein. The pMAL.TM. p2 expression vector, obtained from New England Biolabs, (Beverly, MA) and encoding the maltose binding protein, was used for this construct. The vector was digested with EcoRI and XbaI, ligated to the nucleic acid having SEQ ID NO:1, and having an in-frame stop codon and synthetic EcoRI and XbaI sequences added; and the recombinant molecule transfected into E. coli JM103. Methods for protein fusion and purification are described in the New England Biolabs brochure (1992). The resulting construct is represented by the partial sequence of SEQ ID NO:26. A fusion protein is made that, when cleaved with a blood protease factor Xa, releases flagellin protein having an additional Ile Ser Glu Phe (SEQ ID NO:27) sequence at the N-terminus and an additional Ala Val sequence at the C terminal end.

# WEST

# Search Results - Record(s) 1 through 3 of 3 returned.

L22: Entry 1 of 3

File: USPT

Aug 7, 2001

US-PAT-NO: 6270974

DOCUMENT-IDENTIFIER: US 6270974 B1

TITLE: Exogenous nucleic acid detection

DATE-ISSUED: August 7, 2001

US-CL-CURRENT: <u>435/6</u>; <u>435/91.2</u>, <u>435/91.5</u>, <u>436/173</u>, <u>436/501</u> INT-CL: [7] <u>C12</u> Q <u>1/68</u>, <u>C12</u> P <u>19/34</u>, <u>G01</u> N <u>24/00</u>, <u>C07</u> H <u>19/04</u>

L22: Entry 2 of 3

File: USPT

May 22, 2001

US-PAT-NO: 6235480

DOCUMENT-IDENTIFIER: US 6235480 B1

TITLE: Detection of nucleic acid hybrids

DATE-ISSUED: May 22, 2001

US-CL-CURRENT: <u>435/6</u>; <u>435/91.2</u>, <u>435/91.5</u>, <u>436/173</u>, <u>436/501</u> INT-CL: [7] <u>C12</u> Q <u>1/68</u>, <u>C12</u> P <u>19/34</u>, <u>G01</u> N <u>24/00</u>, <u>C07</u> H <u>19/04</u>

L22: Entry 3 of 3

File: DWPI

Aug 24, 2000

DERWENT-ACC-NO: 2000-549282 ABSTRACTED-PUB-NO: US 6235480B

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TITLE: Detecting the presence of predetermined exogenous nucleic acid target sequence useful for e.g. genotyping, comprises depolymerizing the 3' end of an oligonucleotide probe hybridized to a nucleic acid target sequence

INT-CL (IPC): <u>CO7 H 19/04</u>, <u>C12 P 19/34</u>, <u>C12 Q 1/68</u>, <u>G01 N 24/00</u>

Derwent-CL (DC): BO4, D16

CPI Codes: BO4-BO3A; BO4-BO3B; BO4-EO1; BO4-EO5; BO4-LO4B; B11-CO8E4; B12-KO4F; DO5-AO2C;

D05-H09; D05-H12D1; D05-H18B;